



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,095	09/12/2003	Ashish Thusoo	50277-2256	8871
42425	7590	09/11/2006	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER/ORACLE 2055 GATEWAY PLACE SUITE 550 SAN JOSE, CA 95110-1089			BELL, CORY C	
			ART UNIT	PAPER NUMBER
			2164	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,095	THUSOO, ASHISH	
	Examiner	Art Unit	
	Cory C. Bell	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 June 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-25 have been examined.

Claim Objections

2. Claims 1-25 are objected to because of the following informalities: DML should be defined in its introduction in the claims to clarify its meaning. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 15-25** are rejected because the method does not produce a “useful, tangible, and concrete” the result returned in claims 15-25 is non-tangible as it can be embodied in a carrier wave.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-7, 10, and 15-21 are rejected under 35 U.S.C. 102(b) as being anticipated by reference PL/SQL User's Guide and Reference Release 2 (9.2) hereafter know as [A] (This reference was included with the information discloser statement and has been labeled A).

7. **Claim 1** is rejected for the following reasons:

(Currently Amended) A method comprising:

receiving a database statement that specifies a DML operation that modifies data in one or more columns in a database, *(Page 53 of chapter 5, which teaches modifying a "sal" column, this is written in SQL which is a DML which is inherently received)* and

contains a clause that specifies an aggregate operation to be performed on a plurality of values associated with the data *(Page 53 of chapter 5, teaches aggregating that values of the ename, jab, and sal variables into an emp_info variable)*; and in response to receiving the database statement,

performing: the DML operation on the one or more columns in the database.

performing the aggregate operation on the plurality of values (the query ins inherently run and thus performing these features) and

returning as a result of the database statement a result of the aggregate operation *(Page 53 of chapter 5, teaches aggregating that values of the ename, jab, and sal variables into an emp_info variable which is then returned)*.

8. **Claim 2** is rejected because the aggregation occurs when the change is preformed as they are in the same database statement.

9. **Claim 3** The method of claim 1, wherein the modified data includes values of the data before the DML operation (*sal inherently has a initial value else the update expression would be invalid*).
10. **Claim 4** is rejected because the data must inherently have a value that it is changed to when it is updated.
11. **Claim 5** is rejected for reasons shown in the rejection of claim 1.
12. **Claim 6** is rejected because the change being a deletion is shown in the last paragraph of page 9 of [A] section 12.
13. **Claim 7** is rejected because the method inherently has an SQL engine to process the SQL statements.
14. **Claim 10** is rejected because the system inherently has a client interface to submit a database statement.
15. **Claim 15** is rejected for the following reasons:
See Claim 1 rejection.
16. **Claim 16** is rejected for the following reasons:
See Claim 2 rejection.
17. **Claim 17** is rejected for the following reasons:
See Claim 3 rejection.
18. **Claim 18** is rejected for the following reasons:
See Claim 4 rejection.
19. **Claim 19** is rejected for the following reasons:
See Claim 5 rejection.

20. **Claim 20** is rejected for the following reasons:

See Claim 6 rejection.

21. **Claim 21** is rejected for the following reasons:

It is inherent that the system of [A] has a computer for executing the instructions.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 8, 9, 11, 13, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over [A] in view of Oracle Corporation, "Oracle9i SQL Reference, Release 2 (9.2), known hereafter as [B].

31. **Claim 8** is rejected for the following reasons:

32. Reference [A] teaches the claims upon which claim 8 is dependant. The system inherently contains an SQL Engine and a server side stub, such as the code that facilitates the network communications. The admitted prior art also teaches the SQL engine and the Server side stub, see paras 14 and 15 of the background. Reference [B] teaches Aggregate functions, 4-6 to 4-8 that "*return a single result based on groups of rows.*" Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system with the SQL engine and server side stub. As can be

seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 "*This eliminates the need to SELECT the row after an insert or update, or before a delete.*" Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], "*As a result, fewer network round trips, less server CPU time, fewer cursors, and less server memory are required.*" Reference [A] also shows the need to aggregate data further as it states "*Now do computations involving name and new_sal.*"

33. **Claim 9** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 9 is dependent. The system also inherently has an SQL engine and a client interface. Reference [B] teaches Aggregate functions, 4-6 to 4-8 that "*return a single result based on groups of rows.*" Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 "*This eliminates the need to SELECT the row after an insert or update, or before a delete.*" Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], "*As a result, fewer network round trips, less server CPU time, fewer cursors, and less server memory are required.*" Reference [A] also shows the need to aggregate data further as it states "*Now do computations involving name and new_sal.*"

34. **Claim 11** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 11 is dependent. The system also inherently has an SQL engine and a client interface. [B] teaches Aggregate functions, 4-6 to 4-8 that “*return a single result based on groups of rows*” and multiple aggregate functions, 4-7 “*AVG(MAX(SAL))*.” Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 “*This eliminates the need to SELECT the row after an insert or update, or before a delete.*” Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], “*As a result, fewer network round trips, less server CPU time, fewer cursors, and less server memory are required.*” Reference [A] also shows the need to aggregate data further as it states “*Now do computations involving name and new_sal.*”

35. **Claim 13** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 13 is dependent, as well inherently containing the call interface as it includes a server and a network as stated on pages 9 and 10, “*fewer network round trips, less server CPU time,.* Reference [B] teaches Aggregate functions, 4-6 to 4-8 that “*return a single result based on groups of rows*” and multiple aggregate functions, 4-7 “*AVG(MAX(SAL))*.” Thus, it would have been obvious to one of ordinary skill in the art to include aggregate functions in the system. As can be seen for the following reasons: First, the RETURNING clause is intended to eliminate the need for a select clause, [A] page 9 “*This eliminates the need to SELECT the row after an*

insert or update, or before a delete." Thus to truly eliminate the need for the SELECT clause it would need to integrate all the features of the SELECT clause, i.e. the ability to perform aggregate functions. To, as stated on pages 9 and 10 of reference [A], "*As a result, fewer network round trips, less server CPU time, fewer cursors, and less server memory are required.*" Reference [A] also shows the need to aggregate data further as it states "*Now do computations involving name and new_sal.*"

36. **Claim 22** is rejected for the following reasons:

See claim 11 rejection.

37. **Claim 24** is rejected for the following reasons:

See claim 13 rejection.

Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over [A] in view of [B] in further view of US patent Number 6567803 know hereafter as Ramasey.

38. **Claim 12** is rejected for the following reasons:

Reference [A] teaches the claims upon which claim 11 is dependent. The system also inherently has an SQL engine and a client interface. Reference [B] teaches Aggregate functions, 4-6 to 4-8 that "*return a single result based on groups of rows*" and multiple aggregate functions, 4-7 "*AVG(MAX(SAL))*." See Claim 11 rejection for more information. Ramasay teaches using operator trees corresponding to different aggregate functions (*Col 4 lines 6-16*) and an access plan that lists function and includes structures pointing to workspaces performing the functions(*Col 4 lines 17-46*). It would have been obvious to one of ordinary skill in the art at the time of the invention to include these

features as they provide a method for providing an optimized query that saves processing time and allow for parallel processing.

39. **Claim 23** is rejected for the following reasons:

See claim 12 rejection.

22. Claims 14 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over [A] in view of applicants admitted prior art.

23. [A] teaches the claims upon which claims 14 and 25 are dependant, however it fails to expressly disclose performing the aggregations on old values. This is taught in the second and third paragraphs of the instant applications background. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to include these features, as it would provide the user with useful information.

Response to Arguments

24. Applicants arguments dated June 7, 2006 have been fully considered.

25. As per the rejection of the claims under 35 USC 112 2nd paragraph. The rejections have been withdrawn in light of the instant amended claims.

26. As per the rejection of the claims under 35 USC 101. The rejections for claims 1-7, and 10-14 have been withdrawn. However, the rejection of claims 15-25 are still rejected as they are not tangible, see rejection above.

27. As per the rejections under 35 USC 102 and 103, the applicants arguments are not persuasive. The rejections stand as updated to show the limitations as presented in the instant amended claims. See rejections above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



SAM RIMELL
PRIMARY EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).